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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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John D. Langley

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EXAMINER

BOYD, JENNIFER A

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,023

Applicant(s)

LANGLEY ET AL.

Examiner

Jennifer A. Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 18-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/15/04 A/B/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 - 27, drawn to a composite fabric, classified in class 442, subclass 286.
 - II. Claims 28 - 46, drawn to a method of making a waterproof, breathable composite fabric, classified in class 156, subclass various.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as mechanically punching micropores into the film and then laminating to the outer shell fabric or laminating the additional interior layer to the film prior to laminating it to the outer shell fabric.
3. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.
4. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I, claims 1 – 17, requires a generic stretching of the film and that the composite is laminated to an inner layer of fabric. Species I, unlike Species II, does not have the requirement

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that the outer shell fabric and the microporous barrier layer have equal dimensional stability.

Species I, unlike Species III, does not require stitching along the peripheral edge portions.

Species II, claims 18 – 22, requires that the outer shell fabric and the microporous barrier layer have equal dimensional stability. Species II, unlike Species I, does not have a stretching limitation and does not require an inner fabric layer. Species II, unlike Species III, does not require stitching along the peripheral edge portions.

Species III, claims 23 – 27, requires that the inner fabric is secured to the microporous barrier layer by stitching along the peripheral edge portions. Species III, unlike Species I, does not require stretching of the film. Species III, unlike Species II, does not require that the outer shell fabric and microporous barrier layer have equal dimensional stability.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

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the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. During a telephone conversation with Raymond Linker on July 21, 2005 a provisional election was made with traverse to prosecute the invention of Group I (Species I), claims 1 - 17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18 - 46 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 17 recites the limitation "the intermediate layer" in line 21. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1 – 2, 6 – 8, 10 – 11 and 16 – 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 50, 52 – 56, 63 – 64 and 66 of copending Application No. 10/457,636. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both directed to a laminate comprising a microporous barrier layer containing a mechanical pore-forming agent and at least one fabric layer such as a woven fabric.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1 – 8, 11 and 16 - 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones et al. (US 6,179,939).

Jones is directed to methods of making stretched filled microporous films for use fabric laminates (column 1, lines 5 – 25).

As to claims 1 and 17, Jones teaches a precursor film which includes a filler to impart breathability to the film upon stretching (column 9, lines 55 – 69). The film can be a thermoplastic film (column 9, lines 25 – 55). The stretched films may be laminated to one or more support layers, such as, nonwoven webs, scrims, woven fabrics, foams or other breathable materials (column 11, lines 25 – 35). The Examiner equates the stretched filled film to Applicant's "microporous barrier layer" and the woven support layer to Applicant's "outer shell fabric layer".

As to claims 2 - 3, Jones teaches that the stretched film and support layers may be laminated by known means, such as by thermal point bonding, ultrasonic bonding and adhesive bonding (column 11, lines 35 – 40).

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As to claims 4 – 5, Jones teaches that the stretched film and support layers may be bonded at numerous isolated spaced apart locations using a bond pattern with a total bond area of less than about 35% (column 11, lines 35 – 45).

As to claim 6, Jones teaches a film that does not initially have a support substrate; the Examiner equates this to Applicant's "free-standing film".

As to claims 7 – 8, Jones teaches that the film may be laminated to breathable nonwoven webs such as a spunbonded nonwoven web (column 11, lines 30 – 40).

As to claim 11, Jones teaches that the MVTR (or WVTR) is in excess of 800 g/m²/day (Abstract).

As to claim 16, Jones teaches that the stretched films may be laminated to one or more support layers, such as, nonwoven webs, scrims, woven fabrics, foams or other breathable materials (column 11, lines 25 – 35).

14. Claims 1 – 4, 6 – 7, 10 – 12 and 16 - 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Rechlicz et al. (US 5,032,450).

Rechlicz is directed to a microporous material having a coating of hydrophobic polymer (Abstract) suitable for a variety of coated articles where waterproofness and moisture vapor transmission are important, for example, sanitary products, bedding, tents, sleeping bags, industrial protective garments, etc (column 17, lines 1 – 15).

As to claims 1 and 17, Rechlicz teaches a stretched filled precursor microporous film (columns 2 – 8). Rechlicz teaches that the microporous material may be optionally bonded on one side to at least one layer of porous material (column 15, lines 40 – 45). Suitable porous

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materials include woven fabrics, knitted fabric, nonwoven fabrics, scrims, paper, foams, etc (column 15, lines 45 – 60). The Examiner equates the stretched filled film to Applicant's "microporous barrier layer" and the knitted or woven fabric to Applicant's "outer shell fabric".

As to claims 2 – 4, Rechlicz teaches that the microporous material may be discontinuously bonded to the porous material (column 16, lines 45 – 55) by means of plastic or thermosetting adhesives or powder bonding (column 16, lines 25 – 45).

As to claim 6, Rechlicz teaches a film that does not initially have a support substrate; the Examiner equates this to Applicant's "free-standing film".

As to claim 7, Rechlicz teaches that the composite article may be optionally bonded to one or more layers of porous material (column 16, lines 1 – 15) such as to a nonwoven (column 15, lines 45 – 55).

As to claim 10, Rechlicz teaches that the microporous layer maybe continuously bonded to the porous material. It should be noted that the limitation of "extrusion coating applied directly to the interior surface of said outer shell fabric" is considered to be a method limitation and is not germane to the issue of patentability of the article itself. The burden is upon the Applicant to demonstrate that the final product of Rechlicz is materially different than the product of the instant application.

As to claim 11, Rechlicz teaches that the MVTR of the article is at least about 500 g/m/day (column 13, lines 30 – 45).

As to claim 12, Rechlicz teaches that the porous material can comprise fibers such as polyester, polyamide, acrylic, rayon, cotton, wool, silk, etc and combinations thereof (column 15, lines 60 – 68).

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As to claim 16, Rechlicz teaches that the microporous material may be optionally bonded on one side to at least one layer of porous material (column 15, lines 40 – 45). Suitable porous materials include woven fabrics, knitted fabric, nonwoven fabrics, scrims, paper, foams, etc (column 15, lines 45 – 60).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 6,179,939) in view of McCormack et al. (GB 2,290,052).

Jones teaches the claimed invention above but fails to teach that the spunbond nonwoven fabric is comprised of bicomponent fibers.

McCormack is directed to a stretched-thin film and nonwoven laminate suitable for components of health care items, packaging materials, shower curtains, tents and covers for such items as furniture, computers, automobiles and other vehicles (Abstract). McCormack teaches the use of spunbonded support layers due to their low cost, strength, integrity and soft feel (page 10, lines 1 – 10). McCormack teaches that single component, biconstituent, or bicomponent fibers (i.e. sheath-core fibers) can be used to create the support layer (page 10, lines 20 – 30). It should be noted that is known that use of sheath-core bicomponent fibers allows bonding via the

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sheath component without need for external binders and allows the nonwoven to maintain integrity due to the higher melting point core component.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bicomponent fibers as suggested by McCormack in the nonwoven of Jones motivated by the desire to create a nonwoven laminate with high integrity and bonded without the need for additional binders.

17. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rechlicz et al. (US 5,032,450) in view of Ellis et al. (US 6,511,927).

Rechlicz et al. teaches the claimed invention above but fails to teach that the outer layer of woven or knitted fabric is a dimensionally stabilized fabric as required by claim 13 and that the fabric has a count in at least one fabric direction of 25 yarns per inch or greater as required by claim 15.

Ellis is directed to a breathable waterproof laminate and method for making the same (Title) suitable for a wide range of apparel, industrial, medical and military applications (column 1, lines 20 – 35). Ellis teaches a laminated fabric comprising a face layer 4, a microporous membrane 8, a nonporous layer 12 and backing layer 16 (columns 6 – 8). Ellis teaches that the face layer 4, comprised of a fabric which is positioned furthest from the user or wearer, is exposed to the environment. Therefore, in general, the face layer 4 is a heavy, durable fabric, preferably chosen to withstand conditions encountered in rough terrain. In one advantageous embodiment, the face fabric is a stretch resistant material. It should be noted that the Examiner equates a stretch resistant material to Applicant's "dimensionally stabilized fabric". The face

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fabric is preferably nylon woven fabric having a basis weight of 6 oz/yd² (column 5, lines 30 – 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the stretch resistant fabric as suggested by Ellis as the outer face fabric as the laminate of Rechlicz motivated by the desire to create a breathable waterproof laminate which can withstand conditions encountered in rough terrain.

As to claim 15, Rechlicz in view of Ellis discloses the claimed invention except for that the face fabric has a count in at least one fabric direction of 25 yarns per inch or greater. Ellis teaches that a heavy durable fabric is desirable as the face fabric so that it can withstand conditions encountered in rough terrain. It should be noted that increasing the yarn count in at least one fabric direction can create a heavier fabric. In light of this, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create a face fabric having a count of 25 yarns per inch or greater since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to create a heavy fabric for use as the face fabric in order to create a laminate suitable to protect against conditions encountered in rough terrain.

18. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rechlicz et al. (US 5,032,450) in view of Helmeke (US 6,133,400).

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Rechlicz et al. teaches the claimed invention above but fails to teach that the outer layer of woven or knitted fabric includes a waterproof surface treatment.

Helmeke is directed to a high moisture vapor transmission hot melt moisture cure polyurethane adhesive (Title) suitable for materials such as athletic clothing, medical garments, rain gear, tarps, tents and other waterproof garments (column 1, lines 20 – 30). Helmeke teaches that the compositions of the invention can be used as coatings or as adhesives to adhere a first substrate to a second substrate (column 10, lines 25 – 30). The substrates can include waterproof materials such as woven and tightly spaced polyethylene or polypropylene nonwovens which are treated with hydrophobic agents (column 10, lines 30 – 40). The hydrophobic treatment will cause water to wick into its porous structure. The water vapor evaporates from the hydrophilic layer and diffuses as a gas through the pores of the hydrophobic layer to the exterior environment (column 10, lines 40 – 45).

It would have been obvious to one of ordinary skill in the art at the invention was made to treat the outer fabric layer of Rechlicz with a waterproofing treatment as suggested by Helmeke motivated by the desire to create a breathable, waterproof laminate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Boyd
July 25, 2005



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